

REMARKS

Claims 38, 47 and 51-56, 58-61, 63, 65-68, 72-84 and 93-106 are pending in the above-captioned patent application following this amendment. Claim 57 was found to contain allowable subject matter. Claims 38, 47, 51-56 and 58-92 have been rejected. Claims 38, 51, 54, 59, 60, 65-68, 72, 74, 77-79 and 82 have been amended, claims 57, 62, 64, 69-71 and 85-92 have been canceled without prejudice and claims 93-106 have been added by this amendment for the purpose of expediting the patent application process in a manner consistent with the goals of the Patent Office pursuant to 65 Fed. Reg. 54603 (September 8, 2000), even though the applicants believe that the previously pending claims were allowable.

Support for the amendments to the claims and for the new claims can be found throughout the originally filed application, including the originally filed claims, the drawings and the specification. More specifically, support for the amendment to claims 38, 51, 59, 60, 65-68, 72, 74, 77-79 and 82 and for new claims 93-106 can be found at least in Figures 1, 2, 4A, 4B and 5, and in the specification at page 3, lines 1-26, and at page 9, line 11 through page 13, line 32.

No new matter is believed to have been added. Consideration of the Application is respectfully requested.

Interview Summary

On September 27, 2004, the undersigned attorney for the Applicants conducted an in-person interview with the Examiner, William J. Klimowicz. Prior to the interview, a proposed Amendment and Response to Office Action was forwarded to the Examiner for review. During the interview, the language of the independent claims in the proposed Amendment and Response to Office Action was discussed. Tentatively, no agreement was reached on the language of the claims, although the Examiner indicated he would need further consideration to determine whether the proposed language would make the claims allowable. The undersigned attorney and the Applicants wish to thank the

Examiner for his time and effort during the interview.

Rejection Under 35 U.S.C. § 112, Second Paragraph

Claim 54 has been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Applicants have amended claim 54 as provided above. Therefore, the rejection is believed to be moot.

Rejections Under 35 U.S.C. § 103

Claims 38, 47, 51-56 and 58-92 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Deck et al. (EP 0280263 A2). The Applicants have canceled claims 57, 62, 64, 69-71 and 85-92 without prejudice by this amendment. With respect to the rejection by the Patent Office of claims 57, 62, 64, 69-71 and 85-92 under 35 U.S.C. § 103(a), the rejections are therefore believed to be moot. Further, the Applicants respectfully traverse the rejection of claims 47, 63 and 73 on the grounds that Deck et al. does not teach or suggest the features of these claims. Additionally, claims 38, 51, 54, 59, 60, 65-68, 72, 74, 77-79 and 82 have been amended by this amendment. As amended, the Applicant respectfully submits that a rejection of claims 38, 51, 54, 59, 60, 65-68, 72, 74, 77-79 and 82 is not supported by the cited reference on the grounds that Deck et al. does not teach or suggest the features of the rejected claims, as set forth below.

Deck et al. is directed toward an automated library for data storage disks. The library includes a disk picker assembly 25 that moves up and down along a Z axis using a drive unit 80 and a motor 33. (Figure 1). The disk picker assembly 25 also rotates about an X axis (shown by axis A) that is perpendicular to the Z axis. (Figure 1). The disk picker assembly 25 includes two independently operable disk carrier conveyor mechanisms 42, 43, one being located above the other. (Col. 5, lines 9-13, Figure 3). The conveyor mechanisms 42, 43 convey disks along the Y axis (Figure 1) to a center

of corridor C. Deck et al. does not teach or suggest that the conveyor mechanisms 42, 43 move disks along any direction other than the Y direction relative to the disk picker assembly 25. Stated another way, Deck et al. does not teach or suggest that the conveyor mechanisms 42, 43 move disks along a first axis and a second axis relative to the disk picker assembly 25, with the second axis being different or angled relative to the first axis.

Moreover, Deck et al. does not teach or suggest that a mover that moves the disk picker assembly 25 relative to a disk storing means along two axes that are angled relative to each other. The drive unit 80 and motor 33 only move the disk picker assembly 25 along one axis (the Z axis), as illustrated in Figure 1. The Examiner indicated in the interview that a portion of the disk picker assembly 25 pivots about an axis 49, which arguably causes "movement" of the portion of the disk picker assembly 25 along a second axis. The Examiner stated during the interview that "a component" of movement therefore occurs along the second axis whenever rotation of any portion of the disk picker assembly 25 occurs.

The Applicant respectfully disagree with this logic for two reasons. First, rotational movement is not known as movement along an axis. Using the logic of the Patent Office, any rotational movement is also movement along an axis. The Applicants submit that this is an unreasonable interpretation of Deck et al.

Second, even assuming the above interpretation was found to be reasonable, two completely different structures are used in Deck et al. to accomplish the movement along the two different axes. In other words, the same structure does not effectuate movement of the disk picker assembly 25 along both the first axis and the second axis, as well as rotation of the disk picker assembly 25 about a third axis that is different than the first and second axes.

Claims 47, 63, 65-68 and 72-73:

In contrast to Deck et al., claim 63 is directed toward a transport assembly that

requires “a transporter including a first transport receiver that receives the first cartridge and a second transport receiver that receives the second cartridge; a transport mover that moves the transporter relative to the storage rack and the tape drive, the transport mover moving the transporter along an X axis and a Y axis, and rotating the transporter about a Z axis that is substantially perpendicular to the X and Y axes; and a cartridge mover that moves one of the cartridges between the storage rack and one of the transport receivers, the cartridge mover including (i) a gripper assembly that grips one of the cartridges, (ii) a first gripper mover that moves the gripper assembly along a first axis relative to the transporter, and (iii) a second gripper mover that moves the gripper assembly along a second axis relative to the transporter, the second axis being angled relative to the first axis.”

These features are not taught or suggested by Deck et al. Therefore, a rejection of claim 63 under 35 U.S.C. § 103(a) based on Deck et al. is unsupported. Because claims 47, 65-68 and 72-73 depend directly or indirectly from claim 63, a rejection of these claims based on Deck et al. is also unsupported.

Claims 51-56, 58-61 and 74-84:

Further, amended claim 51 is directed toward a transport assembly that requires “a transporter including a first transport receiver that receives the first cartridge and a second transport receiver that receives the second cartridge; a transport mover that moves the transporter between the storage rack and the tape drive; and a cartridge mover that moves one of the cartridges between the storage rack and one of the transport receivers, the cartridge mover including a gripper that grips one of the cartridges, a first gripper mover that moves the gripper along a first axis relative to the transporter, and a second gripper mover that moves the gripper to move one of the cartridges relative to the transporter along a second axis that is angled relative to the first axis.”

These features are not taught or suggested by Deck et al. Therefore, a rejection

of amended claim 51 under 35 U.S.C. § 103(a) based on Deck et al. would be unsupported. Because claims 52-56 and 58 depend directly or indirectly from claim 51, a rejection of these claims based on Deck et al. would also be unsupported.

Amended claim 59 is directed toward a method that requires the steps of “gripping a first cartridge with a gripper; moving the gripper along a first axis relative to a transporter with a first gripper mover to move the first cartridge into a first transport receiver of the transporter, the transporter being movable relative to the storage rack; and moving the gripper substantially parallel to a second axis relative to the transporter with a second gripper mover to move the first cartridge toward a second transport receiver of the transporter, the second axis being angled relative to the first axis.”

These steps are not taught or suggested by Deck et al. Therefore, a rejection of amended claim 59 under 35 U.S.C. § 103(a) based on Deck et al. would be unsupported. Because claims 60-61 and new claims 93-94 depend directly or indirectly from claim 59, a rejection of these claims based on Deck et al. would also be unsupported.

Amended claim 74 is directed toward a transport assembly that requires “a transporter that includes a first transport receiver that receives the first cartridge and a second transport receiver that receives the second cartridge, the transporter being movable relative to the storage rack; and a gripper that grips one of the cartridges and moves one of the cartridges into the transporter, the gripper moving one of the cartridges along a first axis relative to the transporter and along a second axis relative to the transporter that is different than the first axis.” These features are not taught or suggested by Deck et al. Therefore, a rejection of amended claim 74 under 35 U.S.C. § 103(a) based on Deck et al. would be unsupported. Because claims 75-84 depend directly or indirectly from claim 74, a rejection of these claims based on Deck et al. would also be unsupported.

New Claims

As provided above, new claims 93 and 94 depend from amended claim 59, which is believed to be allowable. Therefore, claims 93 and 94 are also believed to be allowable. Further, new claim 95 is based on claim 57, which was found to contain allowable subject matter. Thus, claim 95 is believed to be allowable.

Moreover, new claims 96-106 have been added by this amendment. New claims 96-106 are of a slightly different scope than the previously pending claims. However, in view of Deck et al., claims 96-106 are believed to be allowable.

In addition to the description of Deck et al. provided previously, the automated library disclosed in Deck et al. does not teach or suggest that a disk can be moved substantially parallel to an axis that extends between the first conveyor mechanisms 42, 43.

In contrast to Deck et al., new claim 96 requires “a transporter including a first transport receiver that receives the first cartridge and a second transport receiver that receives the second cartridge; a transport mover that moves the transporter between the storage rack and the tape drive; and a cartridge mover that moves one of the cartridges between the storage rack and one of the transport receivers, the cartridge mover including a gripper assembly that grips one of the cartridges, a first gripper mover that moves the gripper assembly along a first axis relative to the transporter, and a second gripper mover that moves the gripper assembly relative to the transporter substantially parallel to a second axis that extends between the first transport receiver and the second transport receiver.”

These features are not taught or suggested by the cited reference. Thus, claim 96 is believed to be allowable. Because claims 97-103 depend from claim 96, they are also believed to be allowable.

New claim 104 is directed toward a method that requires “moving a transporter to a first position relative to the storage rack; gripping a first cartridge with a first gripper; moving the first gripper relative to the transporter to move the first cartridge between the

storage rack and the transporter; gripping a second cartridge with the first gripper; and moving the first gripper relative to the transporter to move the second cartridge between the storage rack and the transporter while the transporter remains in the first position.” These steps are not taught or suggested by Deck et al. Thus, claim 104 is believed to be allowable. Because claim 105 depends from claim 104, it is also believed to be allowable.

Further, new claim 106 is directed toward a method that requires “providing a transporter that is movable relative to the storage rack, the transporter having a first transport receiver that receives the first cartridge and a second transport receiver; moving the first cartridge into the transporter along a first axis with a gripper assembly; and moving the first cartridge relative to the transporter along a second axis that is angled relative to the first axis.” These steps are not taught or suggested by Deck et al. Thus, claim 106 is believed to be allowable.

Allowable Subject Matter

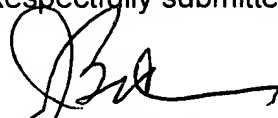
Claim 57 was found to contain allowable subject matter. As provided above, claim 57 has been re-presented in independent form herein as new claim 95. Claim 95 includes the limitations of claim 57, and is therefore believed to be allowable. Because claim 38 depends from claim 95, it is also considered to be allowable.

Conclusion

The Applicant respectfully asserts that claims 38, 47 and 51-56, 58-61, 63, 65-68, 72-84 and 93-106 are allowable, and that the application is now in a condition for allowance. Accordingly, an early notice of allowance is respectfully requested. The Examiner is requested to call the undersigned at 858-672-0454 for any reason that would advance the instant application to issue.

Dated this 7th day of October, 2004.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'J. Broder', with a long horizontal flourish extending to the right.

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